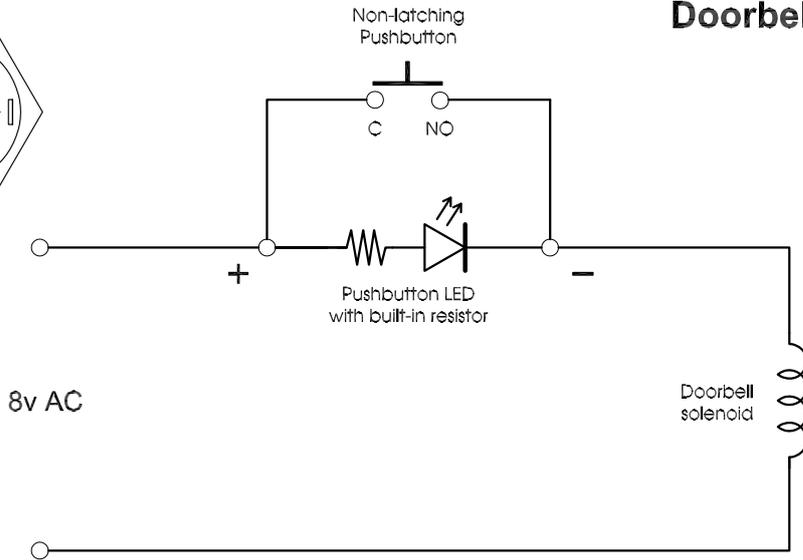
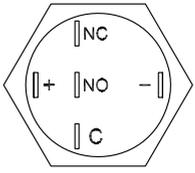


# Doorbell pushbutton with LED



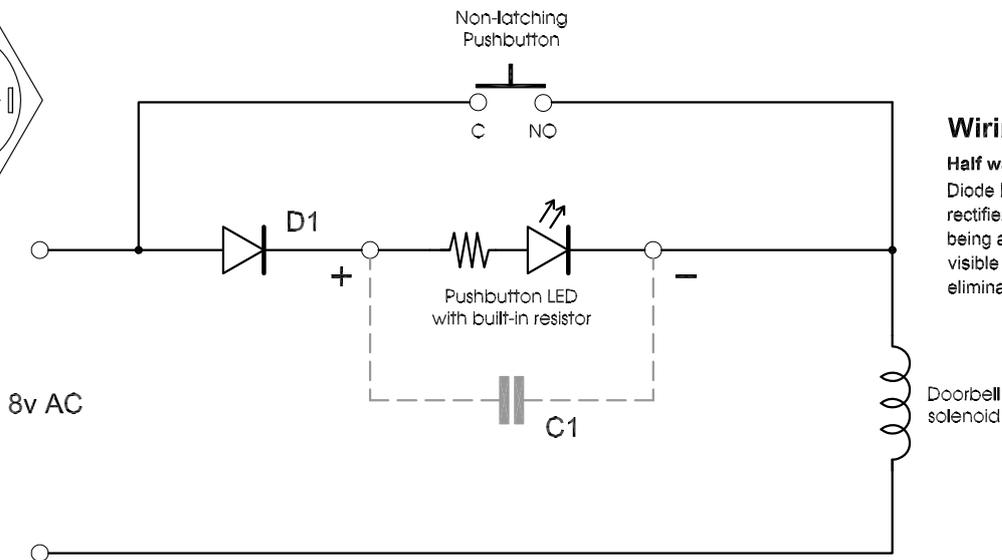
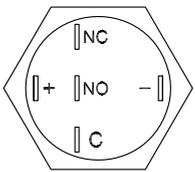
## Wiring option A

### Use AC power for LED

Most LEDs are intended for use with DC power supplies and applying a reverse polarity, such as one half of an AC waveform, may shorten their life. It all depends on how the peak voltage compares to the reverse voltage limit of the LED (a value that is not always available in the pushbutton specification).

Pressing the pushbutton shorts out the LED and allows enough current to operate the solenoid.

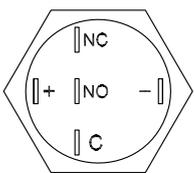
Releasing the pushbutton stops the bell ringing and the LED will light up again.



## Wiring option B

### Half wave AC rectification

Diode D1 acts as a half wave rectifier to prevent reverse voltage being applied to the LED. Any visible flickering of the LED could be eliminated by adding capacitor C1.



## Wiring option C

### Full wave AC rectification

Bridge rectifier BR1 acts as a full wave rectifier to prevent reverse voltage being applied to the LED.

LED flickering is less likely, but if present, it could be eliminated by adding capacitor C1.

